CULTURAL RESOURCES SURVEY OF THE RED DAM 115kV TRANSMISSION PROJECT, JASPER COUNTY, SOUTH CAROLINA

CHICORA RESEARCH CONTRIBUTION 503

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ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 8 mile corridor and substation in southern Jasper County, South Carolina. The work was conducted to assist Central Electric Power Cooperative in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of a transmission line, which will run adjacent to an existing transmission line for the entire 8 mile route. In addition, a new substation will be established at the northern end of the new line. The topography is low and flat with poorly drained soils on much of the corridor.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line and substation. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission project was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified 21 sites (38JA52, 38JA163-164, 38JA298, 38JA352-359, 38JA412-413, 38JA415-420, and 38JA423) in the 0.5 mile APE. Site 38JA52 is a prehistoric and eighteenth to nineteenth century scatter; 38JA163 is a nineteenth to twentieth century scatter; 38JA164 is a twentieth century scatter; 38JA298 is a late nineteenth century scatter; 38JA352 and 38JA353 are nineteenth to twentieth century scatters; 38JA354 is a nineteenth century and prehistoric scatter; 38JA355 is a prehistoric scatter; 38JA356 is a nineteenth century tree; 38JA357 is a Late Archaic, Mississippian, eighteenth, and twentieth century scatter; 38JA358 is a Middle Woodland scatter; 38JA359 is a Late Archaic and nineteenth to twentieth century scatter; 38JA412 is an eighteenth to nineteenth century scatter; 38JA413 is a nineteenth century scatter; 38JA415 is a historic brick scatter; 38JA416 is an eighteenth century scatter; 38JA417 is a historic scatter; 38JA418 is an eighteenth century scatter; 38JA419 is an eighteenth to nineteenth century scatter; 38JA420 is a prehistoric and historic scatter; and 38JA423 are eighteenth century "rice system features." Two sites, 38JA416 and 38JA418, were recommended potentially eligible, while the remaining nineteen sites have been determined not eligible for the National Register of Historic Places.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. Four sites (216-0238, 216-0272, 216-0371, and 216-0372) were identified within the APE. Site 216-0238 is the c. 1915 D.C. Hutson House/Walsh's Cash and Carry; 216-0272 is a c. 1920 house; 216-0371 is a c. 1925 house; and 216-0372 is a c. 1930 house. Site 216-0238 is recommended potentially eligible for the National Register. The other three structures, 216-0272, 216-0371, and 216-0372, have been determined not eligible for the National Register of Historic Places.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the 75-foot right-of-way, which was marked by stakes. All shovel test fill was screened through ¼-inch mesh with a total of 427 shovel tests excavated along the corridor with an additional four shovel tests performed within the proposed substation.

As a result of these investigations no new sites were identified. One previously identified

site, 38JA415, was encountered along the corridor. This site, however, contained only brick and no significant information could be gathered. The site has already been determined not eligible for the National Register and we concur with this determination. The lack of any other newly identified sites is likely the result of poorly drained soils and lack of a level, dry area suitable for habitation.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old that also retained their integrity. An architectural survey has been performed for Jasper County (Harvey and Poplin 1996), so new structures were identified during the current survey.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of an 8 mile corridor to be used for the Red Dam 115kV Transmission Line in eastern Jasper County (Figure 1). The project runs approximately north-south between a newly proposed substation and an existing substation, then turns east, ending at the Beaufort County line of the New River/Great Swamp.

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing, and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area.

Construction and maintenance of the transmission line may also have an impact on historic resources in the project area. The project will not directly affect any historic structures (since none are located on the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 0.5 mile radius around the proposed survey corridor.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Jasper County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to conduct a cultural resources survey for the project.

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, 21 archaeological sites (38JA52, 38JA163-164, 38JA298, 38JA352-359, 38JA412-413, 38JA415-420, and 38JA423) were found within a 0.5 mile area of potential effect (APE). Site 38JA52 is a prehistoric and eighteenth to nineteenth century scatter; 38JA163 is a nineteenth to twentieth century scatter; 38JA164 is a twentieth century scatter; 38JA298 is a late nineteenth century scatter; 38JA352 and 38JA353 are nineteenth to twentieth century scatters; 38JA354 is a nineteenth century and prehistoric scatter; 38JA355 is a prehistoric scatter; 38JA356 is a nineteenth century tree; 38JA357 is a Late Archaic, Mississippian, eighteenth, and twentieth century scatter; 38JA358 is a Middle Woodland scatter; 38JA359 is a Late Archaic and nineteenth to twentieth century scatter; 38JA412 is an eighteenth to nineteenth century scatter; 38JA413 is a nineteenth century scatter; 38JA415 is a historic brick scatter; 38JA416 is an eighteenth century scatter; 38JA417 is a historic scatter; 38JA418 is an eighteenth century scatter; 38JA419 is an eighteenth to nineteenth century scatter; 38JA420 is a prehistoric and historic scatter; and 38JA423 are eighteenth century "rice system features." Two sites, 38JA416 and 38JA418, were recommended potentially eligible, while the remaining nineteen sites have been determined not eligible for the National Register of Historic Places.

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. No properties in or

near the project area have been determined eligible for the National Register of Historic Places. However, an architectural and historical survey of sites that was performed in 1995-96, identified four resources, 216-0238, 216-0272, 216-0371, and 216-0372, within the APE (Harvey and Poplin 1996). Site 216-0238 is the c. 1915 D.C. Hutson House/Walsh's Cash and Carry; 216-0272 is a c. 1920 house; 216-0371 is a c. 1925 house; and 216-0372 is a c. 1930 house. Site 216-0238 is recommended potentially eligible for the National Register. The other three structures, 216-0272, 216-0371, and 216-0372, have been determined not eligible for the National Register of Historic Places.

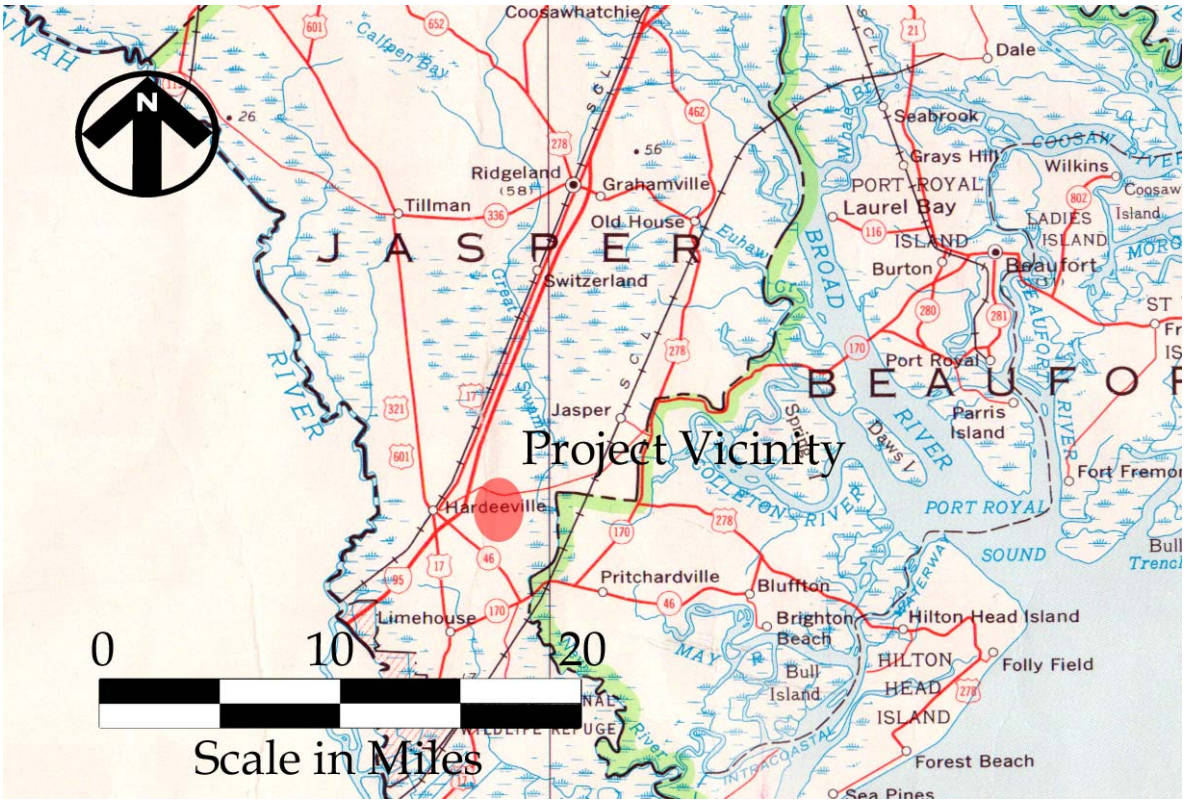

Figure 1. Project vicinity in Jasper County (basemap is USGS South Carolina 1:500,000).

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from November 10-12, 2008 by Ms. Ashley Guba and Ms. Nicole Southerland under the direction of Dr. Michael Trinkley and revealed one archaeological site 38JA415. The site, previously identified from a 2008 survey by Brockington and Associates (no report yet, but recorded by Damon Jackson and Brian Falls on a SCIAA site form dated April 2008), identified the site as having only brick. It was recommended not eligible for the National Register of Historic Places.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and were eligible for the National Register of Historic Places revealed no such structures. While the 1996 architectural survey identified one potentially eligible and three not eligible resources, none of the structures can be seen from the corridor. In addition, these structures have already been affected by an existing transmission line, which has produced a visual intrusion.

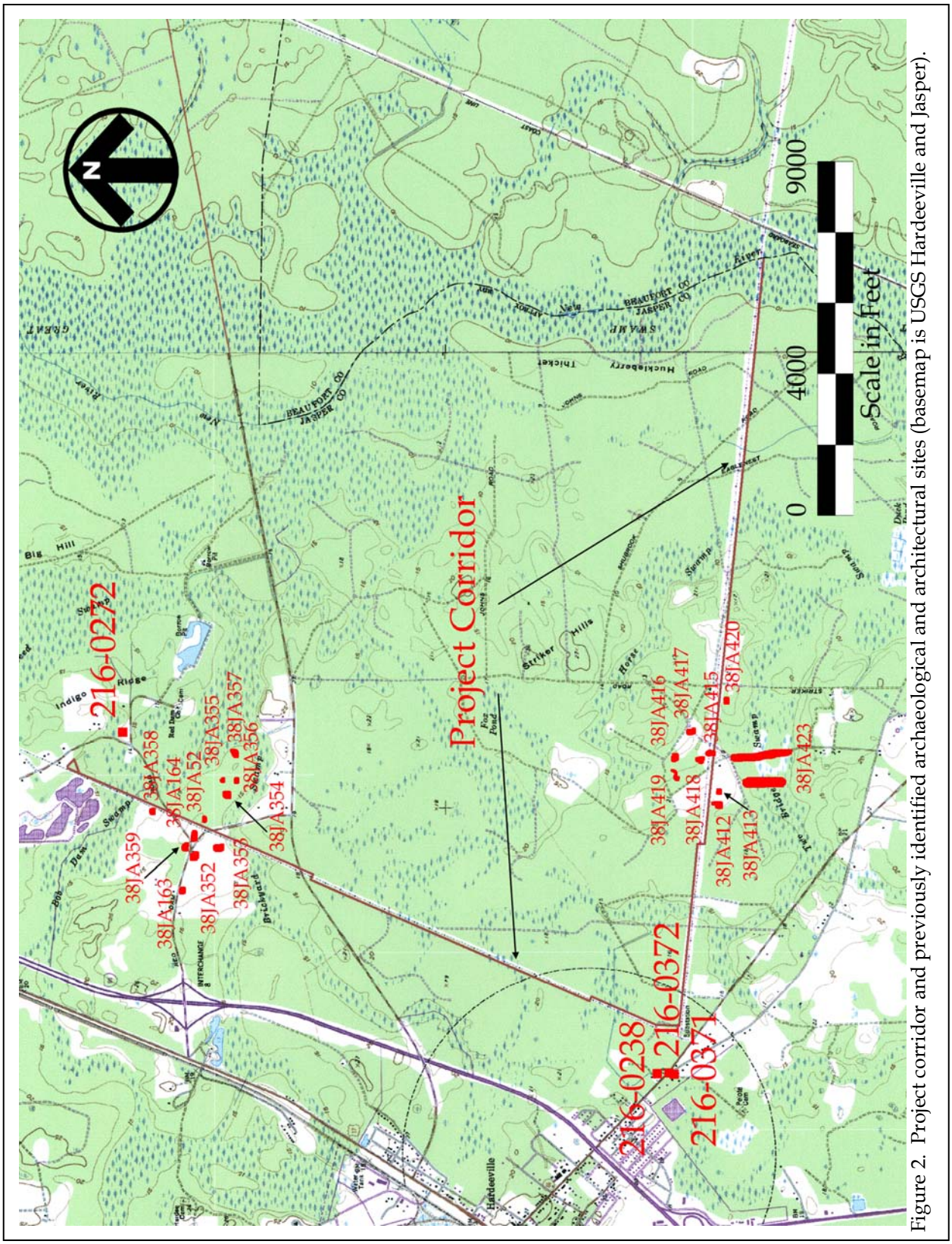

Figure 2. Project corridor and previously identified archaeological and architectural sites (basemap is USGS Hardeeville and Jasper).

Report production was conducted at Chicora's laboratories in Columbia, South Carolina from November 13-14, 2008. The only photographic materials associated with this project are digital, which are not archival. Chicora Foundation will retain these for 30 days.

NATURAL ENVIRONMENT

Physiography

Jasper County is located in the lower Atlantic Coastal Plain of South Carolina and is bounded to the west by the Savannah River, to the south by the Savannah River and the Atlantic Ocean, to the east by Beaufort and Hampton Counties, and to the north by Hampton County. A portion of the eastern border follows the Coosawhatchie and Broad Rivers as they flow southeastward into the Atlantic. The mainland primarily consists of nearly level lowlands and low ridges. Elevations range from about sea level to about 105 feet above mean sea level (AMSL) (Mathews et al. 1980:135).

The county is drained by two significant river systems. The Savannah River at the western edge of the county has a significant fresh water discharge. The New River, which forms part of the county's northern boundary, is far smaller. Because of the low topography of the Jasper area, there are many low-gradient interior drains that are present either as extensions of tidal streams and rivers or as flooded bays and swales.

The project corridor, situated just east of the town of Hardeeville, is located just west of the New River and Great Swamp. The topography in this vicinity slopes gradually to the east, with elevations starting at 20 feet AMSL at the highest point between Horse and Two Bridge swamps and ending at about 8 feet AMSL at New River.

Climate

The major climatic controls of the area are latitude, elevation, distance from the ocean, and location with respect to the average tracks of migratory cyclones. The project's latitude of about 32°20'N places it on the edge of the balmy subtropical climate typical of Florida. As a result, there are relatively short, mild winters and long, warm, humid summers. The large amount of nearby warm ocean water surface produces a maritime climate, which tends to moderate both the cold and hot weather. The Appalachian Mountains, about 220 miles to the northwest, block shallow cold air masses from the northwest, moderating them before they reach the sea islands (Landers 1970:2-3; Mathews et al. 1980:46).

Maximum daily temperatures in the summer tend to be near or above 90°F and the minimum daily temperatures tend to be about 68°F. The summer water temperatures average 83°F. The abundant supply of warm, moist and relatively unstable air produces frequent scattered showers and thunderstorms in the summer. Winter has average daily maximum and minimum temperatures of 63°F and 38°F respectively. Precipitation is in the form of rain associated with fronts and cyclones; snow is uncommon (Stuck 1980:1-2).

The average yearly precipitation is 49.4 inches, with 34 inches occurring from April through October, the growing season for most low country crops. The coastal areas have approximately 285 frost free days annually, while to the interior -- in the project area -- the growing season drops to about 246 days (Stuck 1980:1; Landers 1970). This mild climate, as Hilliard (1984:13) notes, is largely responsible for the presence of many southern crops, such as cotton and sugar cane.

While the temperatures on the coast are not extreme, the relative humidity is frequently high enough to produce muggy conditions in the summer and dank conditions in the winter. Relative humidity ranges from about 63-89% in the summer to 58-83% in the winter. The highest relative humidity occurs in the morning and as the

temperature increases, the humidity tends to decline (Landers 1970:11; Mathews et al. 1980:46).

The coastal area is at a moderately high risk of tropical storms, with 169 hurricanes being documented from 1686 through 1972 (Mathews et al. 1980:56). The last Category 5 hurricane that hit this area was the August 27, 1893 storm, which had winds of 120 miles per hour and a storm surge of 17 to 19.5 feet. Over 1,000 people in South Carolina were reported killed by this storm (Mathews et al. 1980:55). Other notable historic storms have occurred in 1700, 1752, 1804, 1813, and 1885.

Geology and Soils

The coastal region is covered in sands and clays originally derived from the Appalachian Mountains and which are organized into coastal, fluvial, and aeolian deposits. These were transported to the coast during the Quaternary period and were deposited on bedrock of the Mesozoic Era and Tertiary period. These sedimentary bedrock formations are only occasionally exposed on the coast, although they frequently outcrop along the fall line (Mathews et al. 1980:2). The bedrock in the Beaufort area is below a level of 1640 feet (Smith 1933:21).

The Pleistocene sediments are organized into topographically distinct, but lithologically similar terraces parallel to the coast. These terraces have elevations ranging from 215 feet down to sea level. The terraces, representing previous sea floors, were apparently formed at high stands of the fluctuating, though falling, Atlantic Ocean and consist chiefly of sand and clay (Cooke 1936). More recently, research by Colquhoun (1969) has refined the theory of formation processes, suggesting a more complex origin involving both erosional and depositional processes operating during marine transgressions and regression.

The mainland soils are Pleistocene in age and tend to have more distinct horizon development and diversity than the younger soils of the Sea Islands. Sandy to loamy soils predominate in the level to gently sloping mainland areas. The island soils are less diverse and less well developed, frequently lacking a well defined B horizon. Organic matter is low and the soils tend to be acidic. The Holocene deposits typical of barrier islands and found as a fringe on some sea islands, consist almost entirely of quartz sand, which exhibits little organic matter. Tidal marsh soils are Holocene in age and consist of fine sands, clay and organic matter deposited over older Pleistocene sands. The soils are frequently covered by up to 2 feet of salt water during high tide. These organic soils usually have two distinct layers. The top few inches are subject to aeration as well as leaching and therefore are a dark brown color. The lower levels, however, consist of reduced compounds resulting from decomposition of organic compounds and are black. The pH of these marsh soils is neutral to slightly alkaline (Mathews et al. 1980:39-44).

Most of this portion of Jasper County is dominated by Bladen-Coosaw-Wahee soils. These are generally poorly drained and somewhat poorly drained soils that have a loamy surface

Figure 3. View of the borrow pits along the corridor.

layer and a clayey subsoil, as well as somewhat poorly drained soils that have a thick sandy surface and a loamy subsoil (Stuck 1980).

The survey corridor includes areas with eight different soils represented. Poorly and very poorly drained soils dominate the corridor (41.3%) representing Argent, Cape Fear, and Santee soils. Somewhat poorly drained soils (21.9%) include Wahee and Yemassee and moderately well drained soils (32.7%) include Coosaw, Eulonia, and Nemours. In addition, 3.4% of the corridor are borrow pits.

Argent soils have an A horizon of very dark gray (10YR3/1) clay loam to 0.4 foot in depth over a gray (10YR5/1) clay to 3.8 feet in depth. The Cape Fear Series has an Ap horizon of black (10YR2/1) loam to 0.6 foot in depth over a black (10YR2/1) loam to 1.3 feet in depth. Santee soils have an A horizon of Black (N2/0) loam to a depth of 0.5 foot over a black (N2/0) clay loam to 1.2 feet in depth.

Figure 4. View of hardwoods in the low areas of the corridor.

Wahee soils have an A horizon of dark gray (10YR4/1) fine sandy loam to 0.6 foot in depth over a pale brown (10YR6/3) sandy loam to 0.9 foot in depth. Yemassee soils have an A horizon of black (10YR2/1) loamy fine sand to 0.6 foot in depth over a pale brown (10YR5/3) loamy fine sand to 1.0 foot in depth.

The Coosaw Series has an Ap horizon of dark gray (10YR4/1) loamy fine sand to 0.4 foot over a very pale brown (10YR7/3) loamy fine sand to 1.4 feet in depth. Eulonia soils have an A horizon of dark grayish brown (10YR4/2) fine sandy loam to 0.4 foot in depth over a light yellowish brown (10YR6/4) fine sandy loam to 1.1 foot in depth. Nemours soils have an Ap horizon of dark grayish brown (10YR4/2) fine sandy loam to 0.6 foot over a pale brown (10YR6/3) fine sandy loam to 0.8 foot in depth.

The Borrow pits are located toward the northern portion of the corridor, around the proposed substation. Although over 30% of the transmission corridor consisted of moderately well drained soils, most of the corridor was wet during the time of the survey.

Floristics

Jasper County today exhibits five major ecosystems: the coastal marine ecosystem where land has unobstructed access to ocean, the maritime ecosystem which consists of the upland forest area extending inland variable distances, the upland area which accounts for most of the county, the estuarine ecosystem of deep water tidal habitats, and the palustrine ecosystem which consists of essentially fresh water, non-tidal wetlands (Sandifer et al. 1980). All of these areas are today dominated by human action or interaction, including development, agriculture, tree farming, and fire control.

The upland community includes a considerable range of vegetation types: old fields,

pine forests, pine-mixed hardwoods, and mixed hardwoods. In the study area we found areas of current or recent agriculture, giving rise to old field communities, as well as both planted pines and also pine-mixed hardwood second growth areas. All are related by the effects of human intervention on the natural ecology of the area.

Originally most of the corridor was likely dominated by mixed hardwoods, particularly live oak and palmetto on the higher soils. These areas would likely have been somewhat similar to maritime forests. On the lower inland soils there were likely areas of what today are called "Florida Scrub" pine flatwoods which often have slight depressions and ridges characterized by a dense woody pocosin understory. There would also have been some limited areas of wetland swamps with tupelo, bay, and ash. There would likely have been some areas of upland mesic hardwoods, also known as "oak-hickory forests" (Braun 1950). These forests contain significant quantities of mockernut hickory as well as pignut hickory, both economically significant to the aboriginal inhabitants. Other areas are more likely to be classified as Braun's (1950:284-289) pine or pine-oak forest communities. Wenger (1968) notes that the presence of loblolly and shortleaf pines is common on coastal plain sites where they are a significant sub-climax aspect of the plan succession toward a hardwood climax. Longleaf pine forests were likewise a common sight (Croker 1979).

Robert Mills, discussing Beaufort District in the early nineteenth century (which at the time included Jasper), stated:

> besides a fine growth of pine, we have the cypress, red cedar, and live oak . . . white oak, red oak, and several other oaks, hickory, plum, palmetto, magnolia, poplar, beech, birch, ash, dogwood, black mulberry, etc. Of fruit trees we have the orange, sweet and sour, peach, nectarine, fig, cherry (Mills 1972 [1826]:377).

He also cautioned, however, that "some parts of the district are beginning already to experience a want of timber, even for common purposes" (Mills 1972 [1826]:383) and suggested that at least 25% of a plantation's acreage should be reserved for woods.

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Research

Jasper County has received a broad range of investigations, with Derting et al. (1991) citing 50 different studies, although no fewer than 11 are related to the study of a single site, 38JA61, and several others involve various studies of the historic town of Purysburg. Most are associated with some type of cultural resource study, so their scope is often limited.

There have been several archaeological studies in the vicinity of the current project, including transmission lines (see for example Trinkley and Southerland 2004) and an examination of Civil War earthworks and fortifications (Trinkley and Fick 2000; see also Clement et al. 2000).

Prehistoric Overview

The Paleoindian period, lasting from 12,000 to perhaps 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1968). The Paleoindian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989:36-38).

Several Paleoindian points have been found in Jasper County, with the earliest reported find perhaps being the point identified by Waring (Williams 1968:241) from a clay knoll overlooking the Coosawhatchie. Additional points continue to be documented from the area, although the density appears fairly low (Anderson et al. 1992). The pattern of artifacts found along major river drainages has been interpreted by Michie to support the concept of an economy "oriented towards the exploitation of now extinct megafauna" (Michie 1977:124).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 1000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the Calhoun County area. Archaic period assemblages, characterized by corner-notched, side-notched, and broad stemmed projectile points, are common in the vicinity, although they rarely are found in good, well-preserved contexts.

The Woodland period begins, by definition, with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast, about 1000 B.C. in the Upper Coastal Plain, and much later in the Carolina Piedmont, perhaps 500 B.C. It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2000 to 500 B.C. was a period of tremendous

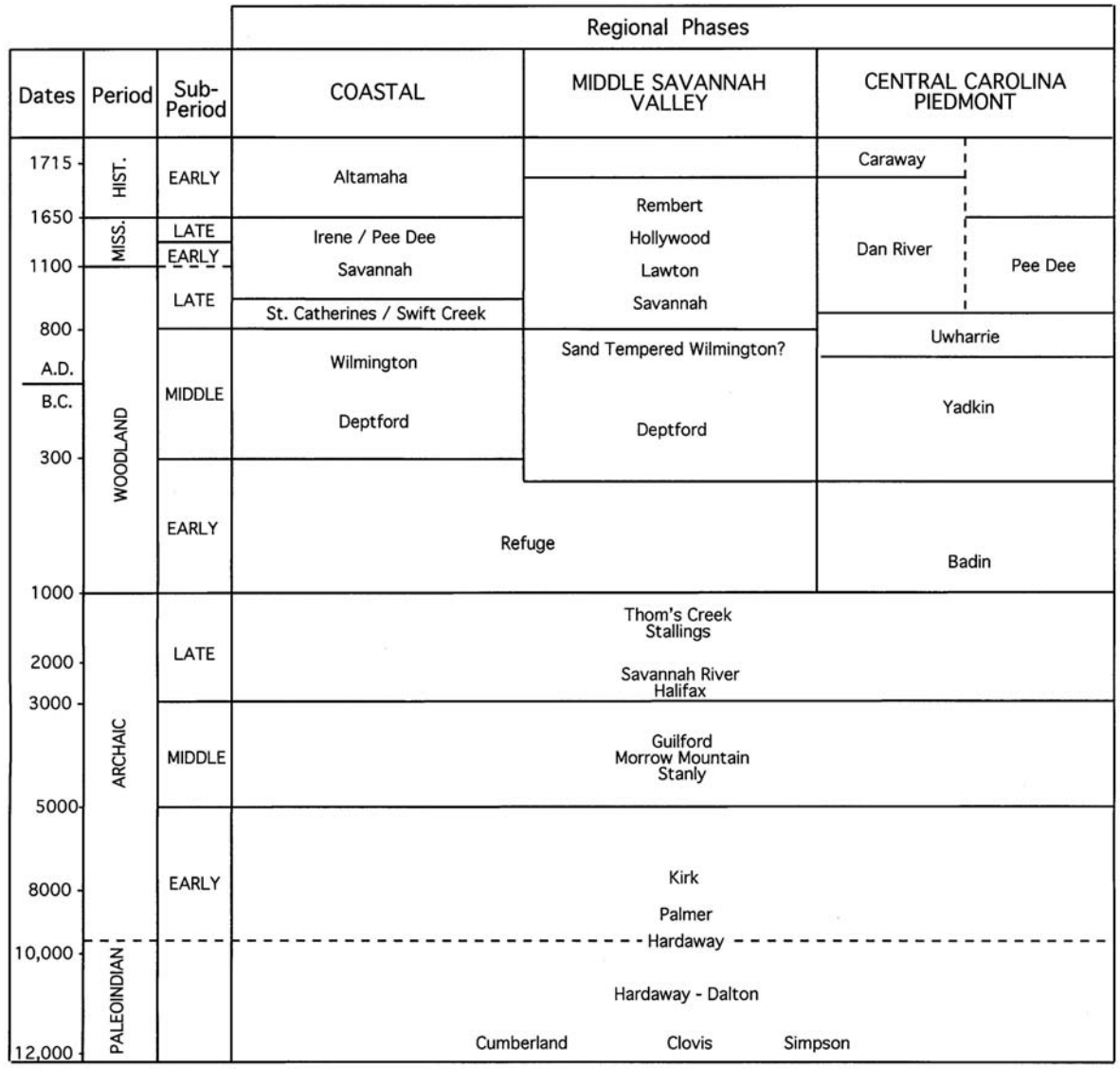

Figure 5. Generalized cultural sequence for South Carolina.

change.

The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish. Various calculations of the probable yield of deer, fish, and other food sources identified from some coastal sites indicate that sedentary life was not only possible, but probable. Further inland it seems likely that many Native American groups continued the previous established patterns of band mobility. These frequent moves would allow the groups to take advantage of various seasonal resources, such as shad and sturgeon in the spring, nut masts in the fall, and turkeys during the winter.

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 1640 is the

most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest coastal phases are named the Savannah and Irene (Known as Pee Dee further inland) (A.D. 1200 to 1550).

Waddell (1980) places the study area in the vicinity of the Hoya Indians, which he documents in Spanish accounts as early as 1562 and as late as 1604. There is, however, relatively little information concerning this group, although it may be reasonable to associate them with the larger Guale group (Thomas et al. 1978). The Hoya, however, managed to escape the attention of both Mooney (1894) and Swanton (1952).

Regardless, the 1715 Yemassee War significantly reduced the numbers of the smaller coastal groups and destabilized their society. It may be that the Hoya were eclipsed by groups such as the Escamacu, often described as the Port Royal or St. Helena Indians and, in 1715, recognize as "about 100 free Indians of ye small Nations among us that never revolted" (Hassell quoted in Waddell 1980:198). By the end of the first third of the eighteenth century the few remaining were known as "settlement Indians" and the last mention of even this group came in 1743.

Historic Overview

Jasper County was not created until 1912, so the area has gone through a variety of political transitions. Initially administered through Charleston, by 1682 legal proceedings were likely handled by either nearby Colleton County and later Granville, although most deeds and other records continued to be filed in Charleston. By 1767 it was largely encompassed in St. Peter's Parish, along with portions in St. Luke's and Prince William's. When South Carolina was divided into circuit court districts in 1769, what is today Jasper fell into Beaufort District. In 1878 portions were removed and associated with Hampton County. Given all of these changes Harvey and Poplin (1996:4) suggest that continuity in the region derives largely from the hamlets and other communities.

Settlement in the area grew slowly, so that by 1700 there were only about 5,000 white settlers and enslaved African Americans in the general area. The region's economy was focused on naval stores, trade with the Native American groups, and cattle ranching. Harvey and Poplin (1996:12) suggest that rice cultivation in the Jasper area didn't begin in earnest until the mid to late eighteenth century, supplemented by indigo.

Purysburg, the principal town in Jasper County, was founded in the 1730s as a settlement of poor Swiss Protestants. While it was a strong and cohesive community, it does not appear to have been particularly successful. It served as a stopping point for coaches traveling between Charleston and Savannah, but there was limited commercial activity. The location provided poor navigation and the low area was unhealthy. Nevertheless, the village remained until the mid-nineteenth century. The ferry associated with the crossing remained until driven out of business by the Rochester ferry, closer to Savannah. This crossing was later known as the Union Causeway or Screven's Ferry (Harvey and Poplin 1996:15).

Other centers did not materialize until after the American Revolution, at which time the summer planters' villages of Grahamville and Hardeeville were created. Coosawhatchie developed at the location where stages crossed the Coosawhatchie River.

The Beaufort area saw many clashes between Loyalists and those supporting the American Revolution, and the area was occupied by British forces for several years. The more interior portions of Jasper County, however, seem to have seen little of the revolution. In fact, Lipscomb (1991:4) recounts only one skirmish in Jasper County, at Coosawhatchie on May 3, 1779.

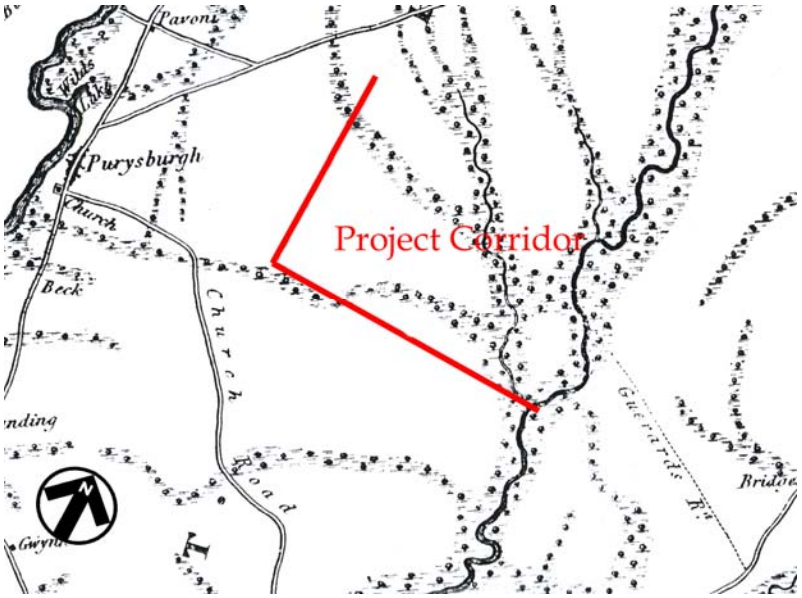

Figure 6. Portion of Mills' *Atlas* showing the project corridor.

With the collapse of indigo after the Revolution and the increase in enslaved blacks, cotton quickly increased in importance, although rice was still an important crop of the planter elite along the Savannah and a few other areas especially adapted to its cultivation.

By 1790 Beaufort District (which included what are today Beaufort, Hampton, and Jasper Counties) had a population of 18, 753. African Americans made up nearly 76% of this population. The region's history is dominated by the large planters -- by 1860 nearly 12,000 acres of prime swamp and high ground were controlled by just 18 plantations. Yet there was also a strong yeoman presence in the district (see McCurry 1995). Mills' *Atlas* of 1825 reveals no settlements in the project area (Figure 6). No settlements are found near the project corridor.

While the antebellum was a period dominated by agriculture (see Harvey and Poplin 1996:22), railroads were beginning to make their appearance in the 1830s. By the 1850s work was underway on the Charleston and Savannah Railway -- a crucial link during the Civil War. Yet even at this early date the rail line began to cast the region's history. The county seat, Grahamville, saw the railroad as noisy, dirty, and a threat to their peaceful summer village, refusing to accommodate a depot. Instead, the stop was placed at Gopher Hill and this small community eventually became Ridgeland, and the county seat of Jasper, while Grahamville gradually disappeared (Harvey and Poplin 1996:28).

An 1862 U.S. Coast Survey of South Carolina shows Hardeevile with at least 11 structures, but northing to the east outside of the town (Figure 7).

The Civil War was focused on the rail line linking Charleston and Savannah, with the Confederate's attempting to secure that connection through a variety of earthworks. While the sea islands were abandoned to Union forces, the South held onto the rail system with tenacity throughout the war (see Trinkley and Fick 2000 for additional information on the region's Civil War fortifications). There were several major battles in the vicinity, including both Coosawhatchie and Honey Hill (Harvey and Poplin 1996:29). While the railroad was held, the region suffered extraordinary losses at the end of the war when Sherman's forces marched through St. Peter's and St. Luke's parishes.

There are at least 11 Union reports of the "Engagement at Honey Hill" (Official Records of the War of the Rebellion, vol. 92, pg. 76 ff.), as well as a Confederate account (Official Records of the War of the Rebellion, vol. 92, pg. 413 ff.). There is also a brief discussion in Ryan (1996) and the battle has been carefully detailed by Clements et al. (2000).

In brief, US Major General John G. Foster, the commander of the Department of the South,

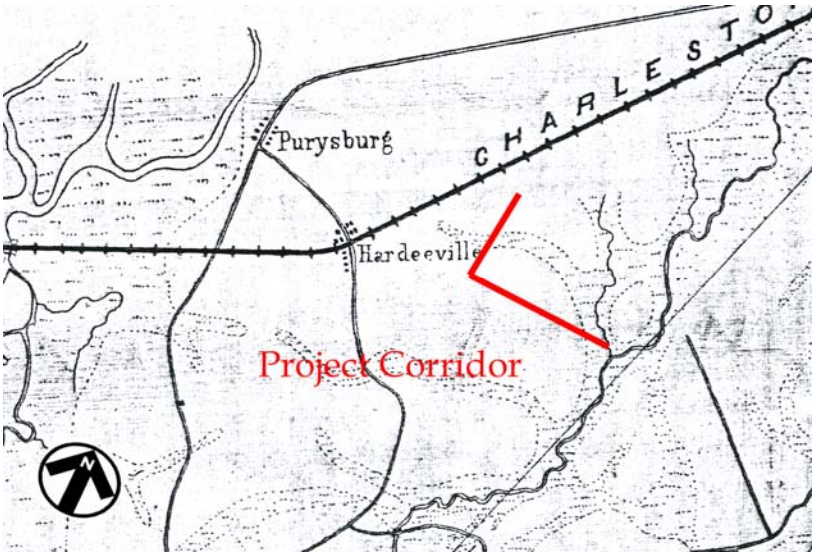

Figure 7. Portion of the 1862 U.S. Coast Survey *Sketch of Portions of Seacoast of South Carolina and Georgia* showing the project corridor.

ordered an expedition from Hilton Head to cut the Charleston & Savannah Railroad in an effort to prevent the Confederates from opposing Sherman's march through the area. US Major General John P. Hatch set out with 5,500 men on November 28 and steamed up the Broad River, off loading at Boyd's Neck. From there his troops marched inland toward Grahamville on November 30. At Honey Hill, three miles from the railroad depot, they encountered 2,000 South Carolina and Georgia Confederate troops under CS Major General Gustavus W. Smith. Hatch's troops, including the 54th Massachusetts, made three determined frontal attacks against the entrenched Confederate positions and were driven back with heavy losses. They failed to make any significant dent in the railroad and eventually retired to their transports. Afterwards, the battle was described as a "reconnaissance in force," although 746 US troops were casualties, compared to only 50 Confederates.

After the Civil War, with slaves no longer providing easy labor for the cotton plantations, the economy was stagnant and a slow period of rebuilding began. The remaining decades of the nineteenth century were focused on the dual goals of restoring the economy and ensuring that African Americans remained in a state as closely as possible resembling bondage.

The hiring of freedmen began immediately, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely

Table 1
Systems of Tenure

	Share-Cropping	Share Renting	Cash Renting
Landlord furnishes:	land housing fuel tools work stock seed half of fertilizer feed for stock	land housing fuel 1/2 or 1/3 fertilizer	land housing fuel
Tenant furnishes:	labor half of fertilizer	labor work stock feed for stock tools seed 3/4 or 2/3 fertilizer	labor work stock feed for stock tools seed fertilizer
Landlord receives:	1/2 of crop	1/4 or 1/3 of crop	fixed amount in cash or lint cotton
Tenant receives:	1/2 of crop	3/4 or 2/3 of crop	entire crop less fixed amount

tempered by the enactment of the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black majority. Added to the Codes were oppressive contracts that reinforced the power of the plantation owner and degraded the freedom of the Blacks. Many white planters formed "Democratic Clubs," designed to counter the "radical" influence. Members of these clubs resolved not to hire "radicals," or blacks associated with radical politics.

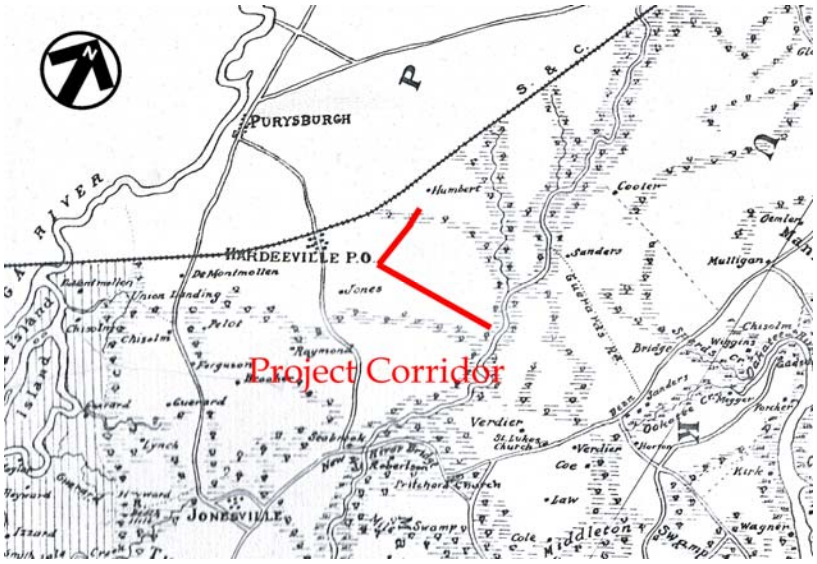

Figure 8. Portion of an 1873 map of Beaufort County showing the project corridor.

While cash labor was initially used, gradually owners turned away from wage labor contracts, at least partially because of the scarcity of money, but also because of the prevailing belief among whites that blacks were so lazy that with money in their pockets they would not work. In its place two kinds of tenancy -- sharecropping and renting -- developed. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks.

Sharecropping required the tenant to pay his landlord part of the crop produced, while renting required that he pay a fixed rent in either crops or money. In sharecropping the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else -- land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share renting, the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest the crop was divided in proportion to the amount of fertilizer that each party supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash renting the landlord provided the land and housing, with the renter providing everything else and paying a fixed per-acre rent in cash.

An 1873 map of Beaufort County shows the project corridor east of Hardeeville. While no settlements are on the corridor, the Jones settlement is located in the vicinity (Figure 8).

While there is no question concerning the importance of tenancy in Jasper County, Harvey and Poplin note that the dominant power in the region was timber. By the last several decades of the nineteenth century large timber companies began to acquire large tracts in Jasper County and the yield of timber from southern forests doubled between 1880 and 1890. During the first three decades of the twentieth century the South's contribution of timber increased from one-third to

one-half of the national market (Harvey and Poplin 1996:36). Companies such as Argent and Ritter expanded rail lines, allowing easier extraction and shipment of the timber from the Jasper forests.

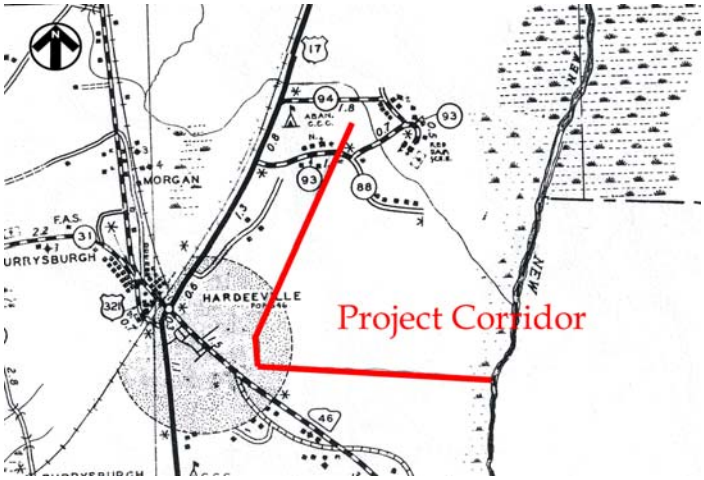

Figure 9. Portion of the 1937 *General Highway and Transportation Map of Jasper County* showing the project corridor.

Northern businesses lead a "second northern invasion" acquiring not only timber lands, but also resorts for the wealthy. Drawn by the myth of the "Old South," they established "plantations" for hunting and entertaining -- often serving to maintain original plantation tracts. Harvey and Poplin (1996:41) also note that many of these plantations were also investments and served as working farms.

By the time Jasper was created in 1912, Ridgeland had grown from Gopher Hill, but its continued growth as the new county seat was exceedingly slow. The town expanded parallel to the railroad tracts, with the depot in the center of the community. Hardeeville, nearly destroyed by the Civil War, reemerged in the twentieth century as the headquarters for Argent Lumber.

The 1937 *General Highway and Transportation Map of Jasper County* reveals no structures along the corridor (Figure 9). The only structures in the vicinity of the current project are along S-93 at the northern portion of the corridor, but none of these structures are on the corridor.

METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the center line of the corridor which has a 75-foot right-of-way.

All soil would be screened through ¼-inch mesh. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no significant modifications.

The GPS positions were taken with a WAAS enabled Garmin 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. WAAS or Wide Area Augmentation System, is a system of satellites and ground stations that provide GPS signal corrections, yielding higher position accuracy – generally an accuracy of 10 feet or better 95% of the time. Both are vital concerns for the study area.

Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects which appeared to have been constructed before 1950. Typical of such projects, this survey would record only those

Figure 10. View of the existing substation near the center of the corridor (current project is located to the rear of the existing transmission line behind the substation).

which has retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs would be taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

Figure 11. Shovel testing along the corridor.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials -- the physical items used on and in the property -- are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The only site recorded in this investigation contained brick, which was noted in the field and discarded. No materials will be curated at the South Carolina Institute of Archaeology and Anthropology. An updated site form for the identified archaeological site has been filed with the South Carolina Institute of Archaeology and Anthropology.

RESULTS OF SURVEY

Introduction

As a result of this cultural resources survey, one site, 38JA415, a brick scatter, was identified (Figure 12). The site had been previously identified during an earlier project (April 2008) by Brockington and Associates and was recommended not eligible for the National Register. No report has been submitted for the project, however, the current survey concurs with the recommendation of not eligible.

The architectural survey failed to identify any further structures that would be potentially eligible for the National Register beyond those already identified (Harvey and Poplin 1996). The only potentially eligible structure, 216-0238, cannot be seen from the proposed transmission line. The other three not eligible structures, 216-0272, 216-0371, and 216-0372, also cannot been seen from the current undertaking, so there will not be any visual intrusion.

Archaeological Resource

38JA415

Site 38JA415 (Figure 13) is a subsurface scatter of brick located on a ridge side slope at an elevation of about 20 feet AMSL. The site is located just west of an existing dirt road in an area of second growth pines and hardwoods. A GPS UTM in the southern portion of the site is 496563E 3570251N (NAD27 datum).

The site was originally recorded from a 2008 survey performed by Brockington & Associates of the New Morgan Tract (no report has been submitted at the time of the current project). The site form (recorded by Damon Jackson and Brian Falls) cited only brick present at the site, which measured approximately (65 X 97.5 feet). They recommended the site not eligible for the National Register of Historic Places.

The current survey encountered the southern portion of 38JA415, just west of a dirt road. Shovel testing was performed at 50-foot intervals along the cardinal directions along the current project corridor and within the 75-foot right-of-way (the northern and southern shovel tests were just outside the right-of-way).

A total of seven shovel tests were excavated with two producing brick. Only one of the positive shovel tests was on the current project corridor, the other positive test, located to the north, is outside the project right-of-way.

Soils in the area resemble the moderately well drained Nemours Series. This soil has an Ap horizon of dark grayish brown (10YR4/2) fine sandy loam to 0.6 foot in depth over a pale brown

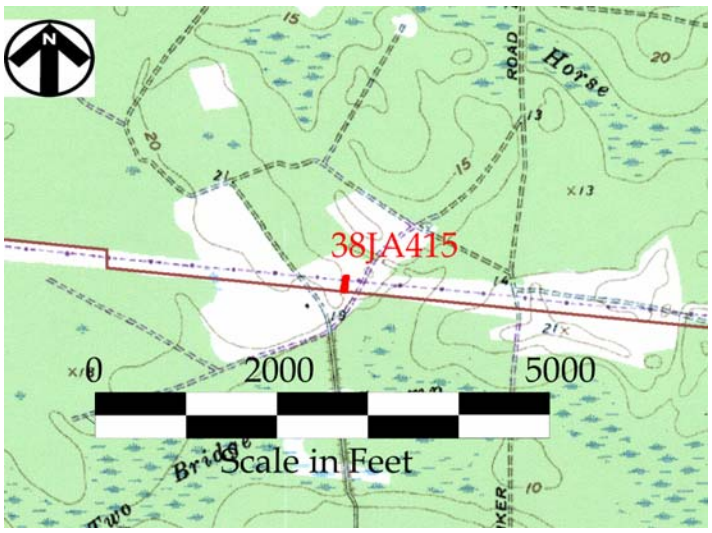

Figure 12. Portion of the corridor showing 38JA415 (basemap is USGS Hardeeville 7.5').

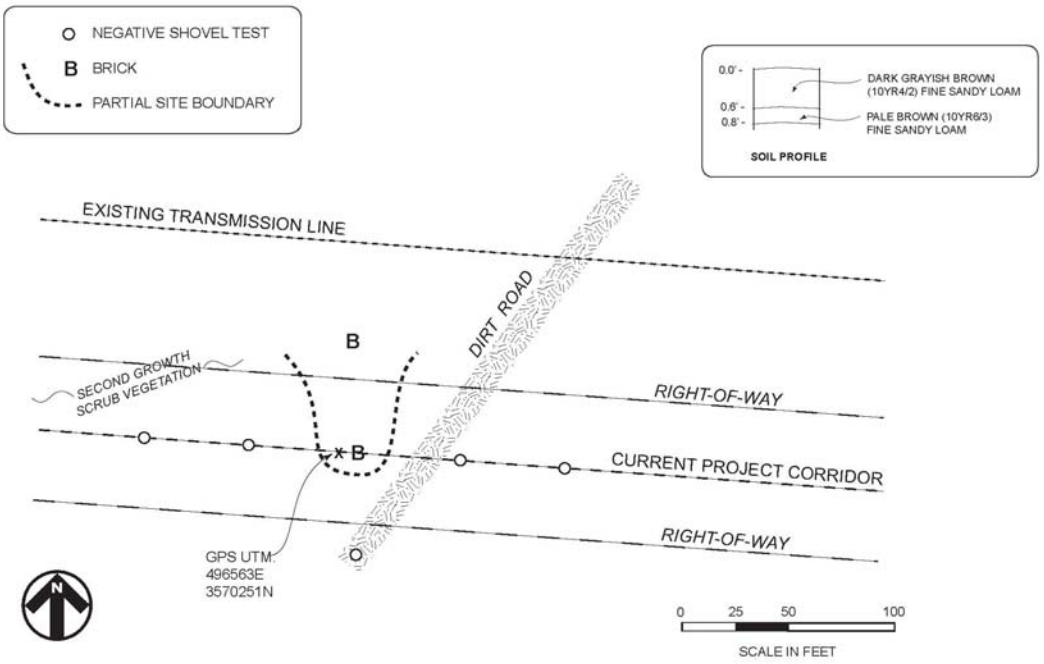

Figure 13. Sketch map and soil profile of 38JA415.

(10YR6/3) fine sandy loam to 0.8 foot in depth.

As previously mentioned, brick was the only artifact found, which was noted and discarded in the field. Brick is not diagnostic, however, the brick did seem historic in the respect that it was not the modern 3-hole variety, common in the twentieth century. The largest piece of brick was about three cubic inches in size.

The earlier Brockington & Associates survey recommended 38JA415 not eligible for the National Register of Historic Places. Although only a small portion of the entire site was encountered during the current survey, we concur with the recommendation. No historic maps were identified that contained structures in this area and no diagnostic artifacts were found that could attest to the time and function of the site.

Site 38JA415 is recommended not eligible for the National Register of Historic Places. No additional management activity is recommended pending the review and concurrence by the State Historic Preservation Office.

Historic and Architectural Resources

As previously discussed, there are no previously recorded National Register buildings, districts, structures, sites, or objects in the study area. There is, however, one potentially eligible architectural resource (216-0238) and three not eligible structures (216-0272, 216-0371, and 216-0372) found within the 0.5 mile APE. These resources were recorded during an architectural survey of the county (Harvey and Poplin 1996).

The potentially eligible structure, 216-0238, is the c. 1915 D.C. Hutson House/Walsh's Cash and Carry. Located in the Hardeeville town limit, the structure cannot be seen from the current project. The view is obstructed by woods, an existing substation, and an existing transmission line. The current transmission corridor is located behind (to the east and north) of the existing transmission line. The new corridor will not have any visual intrusion on the resource.

The remaining three not eligible structures include 216-0272, a c. 1920 house; 216-0371, a c. 1925 house; and 216-0372, a c. 1930 house. Like the potentially eligible structure, these resources cannot be seen from the current undertaking.

No additional properties were encountered which may be eligible for the National Register of Historic Places.

While a number of Civil War sites have been documented from this area, none are known to be within the 0.5 mile APE and none were encountered on the survey corridor.

CONCLUSIONS

This study involved the examination of an 8-mile corridor for the Red Dam Transmission Line. The project area is located in the eastern portion of Jasper County. This work, conducted for Central Electric Power Cooperative, examined archaeological sites and cultural resources found on the proposed project corridor and is intended to assist the company in complying with their historic preservation responsibilities.

As a result of this investigation, 38JA415, was uncovered. The site is a historic brick scatter that is recommended not eligible for the National Register for its inability to address significant research questions because of its lack of diagnostic artifacts to identify its function or time period.

A survey of historic sites was conducted within a 0.5 mile APE. No structures were found that would warrant a National Register of Historic Places nomination. The previously identified structures in the APE were revisited and none were considered to be eligible for the National Register. The structures cannot be seen from the project corridor and will not be affected. While a number of Civil War sites have been documented for the area, none are known to be within the 0.5 mile APE and none were encountered on the survey corridor.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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